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HOLOTYPE SPECIMENS OF REPTILES AND
AMPHIBIANS IN THE COLLECTION OF THE
CALIFORNIA ACADEMY OF SCIENCES

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INTRODUCTION

This paper has been prepared to make available to other workers information concerning the type material of reptiles and amphibians present in the collections of the California Academy of Sciences. The need for this work is considerable. As a result of the earthquake and fire which occurred in San Francisco in April, 1906, the building which housed the Academy's collections was destroyed. Much confusion has existed among herpetologists as to which holotypes were lost, which were saved, and what has subsequently happened to the collections.

HISTORY OF THE DEPARTMENT

The Department of Herpetology was organized in the year 1895 under the curatorship of Mr. John Van Denburgh, who had already begun his herpetological researches at Stanford University as a student. At the time the collection consisted of some odds and ends sent in by various friends of the Academy, including a very fine collection of reptiles and amphibians

from Lower California and western Mexican states made under the direction of Dr. Gustav Eisen. These were housed, together with the fish, in the department headquarters in the museum building at 833 Market Street.

On Mr. Van Denburgh's departure for medical school at Johns Hopkins University, Baltimore, the department remained inactive until his return in 1902, when he resumed his curatorial duties. In May, 1904, Mr. Slevin was appointed assistant and under Dr. Van Denburgh's instruction was taught the art of preserving specimens and the care of the department's collections. At the same time short trips were made in the vicinity of San Francisco to become familiar with field work in preparation for the forthcoming Academy expedition to the Galapagos Islands. The expedition left San Francisco on June 28, 1905. While Mr. Slevin was absent in the field, Mr. John I. Carlson assisted in caring for the collections and did the necessary labeling and cataloging. When, on April 18, 1906, the great earthquake and fire destroyed the Academy, the entire collection, which at the time numbered 8,100 specimens, was entirely wiped out with the exception of thirteen specimens saved by the curator.

On the morning of the disaster Dr. Van Denburgh hurried to the museum to see if the building was in danger. Finding the fire spreading rapidly, he made his way to the department with all speed, his mind being set on saving the type specimens. He succeeded in saving ten of these, three miscellaneous specimens, as well as the department's catalog and Jan's *Iconographie*. These were housed in his home outside the fire limit and were kept there until the Academy again secured permanent quarters.

The expedition to the Galapagos Islands did not return until November 29, 1906, bringing back 4,506 specimens with which to start a new collection. The housing of the Galapagos material proved a problem owing to the damage done the previous April. However, the director of the Academy at that time, Mr. Leverett Mills Loomis, had a portion of a floor in the damaged building walled off before the return of the expedition, and the department was installed here until it became necessary to tear down the wreck of the building.

When the demolition of the building was about to take place the department moved to a vacant store on Turk Street, near Market Street. This move permitted the erection of temporary shelving, and with the purchase of glassware it became possible to begin sorting, labeling, and cataloging the Galapagos collections. This was fortunately completed before another move was made.

At about this time (1908), Dr. Joseph C. Thompson, M.D., and surgeon on duty with the United States Navy, joined the Academy's staff as assistant curator of herpetology. However, he was able to spend but little time at the Academy for his military obligations were constantly carrying him to remote regions. As a result of these military tours he was able to amass

large herpetological collections, particularly from Japan, Formosa, and the Philippine Islands, these specimens being deposited in the department's collection. Dr. Thompson's association with the Academy was rather abruptly terminated just prior to June, 1912, as a result of several disagreements with Dr. Van Denburgh.

With the exception of the Department of Herpetology, whose collections were now of considerable size because of the Galapagos Expedition and Dr. Thompson's efforts, the Academy was housed in a residence at 1812 Gough Street. The Trustees decided it would be safer to have its possessions in a fireproof building and under one roof; another move was thus made to the Security Building at 343 Sansome Street. Here the department was housed until it made its final move in 1915 to its permanent quarters in Golden Gate Park.

With the improved conditions it was again possible to conduct field work, and the building up of the collections for the work on the reptiles of western North America was continued for the next eight years, with the exception of an interval during World War I, when Mr. Slevin was absent on duty with the Navy. The field work entailed numerous trips throughout the western states, and, in 1921, the Gulf of California. The results of these trips were summed up in a series of publications of the Academy, culminating in the massive work, *The Reptiles of Western North America*, which appeared in 1922.¹

The untimely death of Dr. Van Denburgh, on October 24, 1924, during a vacation to Hawaii, left Mr. Slevin to carry on the work, first as assistant, and later as curator. Opportunities presented themselves to carry activities further afield, and, as it had always been Dr. Van Denburgh's idea to make a world-wide collection, advantage was taken of the opportunities offered. This resulted in several trips to Central America, including Guatemala, Panama, and Mexico, and three trips to Australia. In addition the collections were augmented by several exchanges with the Museum of Comparative Zoology of Harvard University, the British Museum (Natural History), and the Muséum d'Histoire Naturelle in Paris, and the purchase of a considerable part of the E. H. Taylor Philippine collection.

Unfortunately depressions and wars curtailed the activities enjoyed in former years and greatly retarded the growth of the collection. For the period of World War II departmental activity ceased when the curator joined the staff of the Academy's optical shop engaged in work for the Navy.

At the close of the war activities were again resumed. Several new field trips were undertaken, including participation in the Sefton Foundation expedition to the Gulf of California in 1953. Presently the curator, having recently completed his manuscript concerning the history of the Galapagos Islands, has turned his attention to the study of the Australian collections.

¹Bibliographies of the department's staff members are presented at the conclusion of this paper.

EXPEDITIONS ENGAGED IN BY DEPARTMENT MEMBERS

Through the years the herpetology department has been active in the field. Even before its organization in 1895, however, three Academy members, Walter C. Bryant, curator of birds; Dr. Gustav Eisen, and Mr. Frank H. Vaslit, made valuable herpetological collections in Lower California, Mexico, and in Tepic, on the Mexican mainland, in the years 1889, 1890, 1892, 1893, and 1894. Also, Dr. John Van Denburgh, who later became the department's first curator, made an expedition to southern California in 1894.

Although no official herpetologist accompanied the expedition to the Revillagigedo Islands in 1903, a collection of reptiles was included in the material obtained. The spring of 1904, however, saw the first real effort at building up the Academy's herpetological collection when Dr. Van Denburgh's assistant, Mr. J. R. Slevin, gathered material in the vicinity of San Francisco and Carmel, California, while preparing for the expedition to the Galapagos Islands.

All of the collections mentioned above were destroyed in the great fire of April 18, 1906, with the exception, as already stated, of thirteen specimens saved by the curator.

Activity in the field has depended on financial conditions and the state of the world in general. The following is a chronological list of the expeditions (both before and after the organization of the department) which have resulted in notable additions to the herpetological collections of the Academy:

<i>Year</i>	<i>Collector</i>	<i>Region</i>
1889	Walter E. Bryant	Lower California, Mexico
1890	"	"
1892	"	"
1892	Gustav Eisen	"
1893	"	"
1894	{ Gustav Eisen and Frank H. Vaslit	Tepic, Mexico
1894	John Van Denburgh	Southern California
1903	Academy Expedition	Revillagigedo Islands, Mexico
1904	Joseph R. Slevin	San Francisco and Carmel, California
1905	John I. Carlson	Arizona
1905	Joseph R. Slevin	Revillagigedo Islands, Mexico, and Galapagos Islands
1906	"	Galapagos Islands
1910	John I. Carlson	Arizona
1911	Joseph R. Slevin	Coastal Regions of California, Oregon, and Washington
1912	{ Joseph R. Slevin and John Van Denburgh	Arizona
1913	Joseph R. Slevin	Nevada and Utah
1914	"	Tehachapi Mountains, California
1914	John I. Carlson	Arizona
1915	Joseph R. Slevin	Southern California, Nevada, and Utah
1915	"	California
1916	"	Nevada and Utah
1917	"	Southern California

Year	Collector	Region
1918	{ John Van Denburgh and Joseph R. Slevin	Channel Islands, California
1919	Joseph R. Slevin	Northern California and Oregon
1919	"	Cape Region, Lower California, Mexico
1920	"	Arizona
1921	"	Gulf of California, Mexico
	(Academy's Gulf of California Expedition)	
1922	{ John Van Denburgh and Joseph R. Slevin	Sierra Nevada Mountains, California
1922	Joseph R. Slevin	Guadalupe Island, Mexico
1923	{ John Van Denburgh and Joseph R. Slevin	San Pedro Martir Mountains, Mexico
1924	Joseph R. Slevin	Guatemala
1925	"	Revillagigedo Islands, Mexico
	(Ortolan Expedition)	
1926	Joseph R. Slevin	Farallon Islands, California
1926	"	Guatemala
1927	"	Southern California
1928-1929	"	Galapagos Islands
1929-1930	"	Australia
1931	"	Death Valley, California
1936-1937	"	Australia
1939	"	Panama
1940	"	Cedros Island, Lower California, Mexico
1947	Joseph R. Slevin	Arizona
1947-1948	"	Australia
1949	"	Southern California and Arizona
1951	"	Lower California, Mexico
1952	"	"
1953	{ Joseph R. Slevin and Walter C. Brown	Northern California
1953	Joseph R. Slevin (Orca Expedition)	Gulf of California, Mexico

NOTES ON THE COLLECTION

Examination of the first two volumes of the catalog of the Department of Herpetology of the Academy, which were saved by Dr. Van Denburgh just before the spread of the fire made the building untenable, reveals that the herpetological collections then contained some 8,100 specimens. Of this number only 13 were saved. These included 10 of the 15 holotypes and three additional specimens, 2 of *Plethodon intermedius* and 1 of *Pternohyla fodiens* (a topotype). The 15 holotypes in the possession of the Academy just before the advent of the earthquake and fire were:

1. *Autodax lugubris farallonensis*
2. *Chrysemys nebulosa*
3. *Eumeces lagunensis*²
4. *Gerrhonotus scincicauda ignavus*
5. *Lampropeltis nitida*²
6. *Plethodon vandykei*²

²Holotypes which were destroyed in 1906. In this paper neotypes are designated for *Lampropeltis nitida* (U.S.N.M. 64585), *Plethodon vandykei* (C.A.S. 47495) and *Verticaria sericea* (C.A.S. 52555). A neotype was designated for *Eumeces lagunensis* (U.S.N.M. 67398) by H. M. Smith and E. H. Taylor in 1950 (Bull. 199, U. S. Nat. Museum, p. 167).

7. *Verticaria sericea*²
8. *Bellophis zonatus*²
9. *Sceloporus becki*
10. *Sceloporus licki*
11. *Sceloporus obscurus*
12. *Uta repens*
13. *Uta stellata*
14. *Uta martinicensis*
15. *Xantusia gilberti*

At the present moment (October, 1954) the collection contains approximately 76,000 catalogued specimens of reptiles and amphibians, including 171 holotypes and neotypes, and an unknown number of paratypes.³ This collection represents the efforts of 47 years and is notable for its excellent representation of the herpetological faunas of the Galapagos Islands, western North America, Australia, Japan, Formosa (and related islands), and the Philippine Islands.

Throughout the remainder of this article the following abbreviations will be used:

C.A.S.—California Academy of Sciences, San Francisco.

S.U.—Natural History Museum of Stanford University.

U.S.N.M.—United States National Museum, Washington, D. C.

E.H.T.—Edward Harrison Taylor (private collection).

orig. no.—Original number.

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ORDER APODA

Family Caeciliidae

Ichthyophis glandulosus Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 516–517.

Holotype: C.A.S. 60073 (orig. no. E.H.T. 1595A); Abungabung, Basilan Island, Philippine Islands; E. H. Taylor, October 23, 1921.

ORDER CAUDATA

Family Hynobiidae

Hynobius bicolor Dunn, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 12, no. 2, p. 28.

²See page 533 for footnote.

³Paratypes have never been designated as such in the Academy's collection of reptiles and amphibians. The authors have made no attempt to determine what paratypes may be represented, for the time alone necessary to conduct such an inquiry would itself be prohibitive.

Holotype: C.A.S. 26447; Tsushima, South Island, Korean Straits, Japan; V. Kühne, October, 1910.

Hynobius ikishimae Dunn, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 12, no. 2, p. 28.

Holotype: C.A.S. 26318; Iki-shima, Korean Straits, Japan; V. Kühne, October, 1910.

Hynobius retardatus Dunn 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 12, no. 2, p. 27.

Holotype: C.A.S. 35928; Noboribetsu, Iburi Peninsula, Hokkaido, Japan; V. Kühne, August 30, 1911.

Hynobius tagoi Dunn, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 12, no. 2, p. 29.

Holotype: C.A.S. 26563; Tsushima, North Island, Korean Straits, Japan; V. Kühne, October, 1910.

Hynobius vanderburghii Dunn, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 12, no. 2, p. 28.

Holotype: C.A.S. 26714; Nara, Yamato Province, Hondo, Japan; V. Kühne, May, 1911.

Pachypalaminus boulengeri Thompson, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, pp. 184-186, pl. 14.

Holotype: C.A.S. 33192; Odaigahara Mt., Yamato Province, Honshu, Japan; V. Kühne, October, 1911.

Family **Plethodontidae**

Autodax lugubris farallonensis Van Denburgh, 1905.

Publ.: Proc. Calif. Acad. Sci., ser. 3, vol. 4, pp. 5-6.

Holotype: C.A.S. 3731; South Farallon Island; C. Fuchs, February 8, 1899.

Plethodon elongatus Van Denburgh, 1916.

Publ.: Calif. Acad. Sci., ser. 4, vol. 6, no. 7, pp. 216-218.

Holotype: C.A.S. 29096; Requa, Del Norte County, California; J. R. Slevin, May 22-26, 1911.

Plethodon vandykei Van Denburgh, 1906.

Publ.: Proc. Calif. Acad. Sci., ser. 3, vol. 4, no. 4, pp. 61-63.

Holotype: C.A.S. 6910; Paradise Valley, Mt. Rainier Park, Washington; E. C. Van Dyke, July 15-31, 1905. This specimen was destroyed in the San Francisco earthquake and fire of 1906.

Neotype: C.A.S. 47495; Forks, Clallam County, Washington; J. Van Denburgh, September 16, 1919.

ORDER **SALIENTIA**

Family **Bufo**nidae

Bufo mcgregori Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 182-183.

Holotype: C.A.S. 61839 (orig. no. E.H.T. 1468A); Pasananka, Zamboanga, Mindanao Island, Philippine Islands; E. H. Taylor, September 30, 1920.

Family **Hylidae**

Hyla hallowellii Thompson, 1912.

Publ.: Herpetological notices, no. 2 (Prodrome of descriptions of new reptilia

and batrachia from the Far East), pp. 2-3 (privately printed: San Francisco), June 28, 1912.

Holotype: C.A.S. 23808; Kikaiga-shima, Loo Choo Islands, Japan; V. Kühne, June 21, 1909.

Hyla hallowellii Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 3, July 29, 1912.

Holotype: C.A.S. 23806; Kikaiga-shima, Loo Choo Islands, Japan; V. Kühne, April 30, 1910.

Family Microhylidae

Kaloula negrosensis Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 180-182.

Holotype: C.A.S. 62124 (orig. no. E.H.T. 538); Hinigaran, Negros Island, Negros Occidental Province, Philippine Islands; E. H. Taylor, April, 1915.

Kaloula rigida Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 176-178.

Holotype: C.A.S. 61475 (orig. no. E.H.T. 7681); Balbalan, Kalinga Subprovince, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April 26, 1920.

Family Ranidae

Cornufer cornutus Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 175-176.

Holotype: C.A.S. 61476 (orig. no. E.H.T. 764); Balbalan, Kalinga Subprovince, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April 24, 1920.

Cornufer montanus Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 272-273, pl. 4, fig. 4.

Holotype: C.A.S. 61179 (orig. no. E.H.T. 861); Mount Banaho, Laguna Province, Luzon Island, Philippine Islands (altitude 1500 meters); E. H. Taylor, May 31, 1920.

Cornufer rivularis Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 270-272, pl. 4, fig. 3.

Holotype: C.A.S. 61477 (orig. no. E.H.T. 761); Balbalan, Kalinga Subprovince, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April 25, 1920.

Cornufer subterrestris Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 274-275.

Holotype: C.A.S. 61518 (orig. no. E.H.T. 707); along mountain trail, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April 17, 1920.

Micrixalus diminutiva Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 267-269, pl. 1, figs. 3-4, pl. 2, figs. 2-3.

Holotype: C.A.S. 61842 (orig. no. E.H.T. 1066); Pasananka, Zamboanga, Mindanao Island, Philippine Islands; E. H. Taylor, November 10, 1920.

Philautus basilanensis Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 169-171.

Holotype: C.A.S. 60145 (orig. no. E.H.T. 1510); Abungabung, Basilan Island, Philippine Islands; E. H. Taylor, October 15, 1920.

Philautus polillensis Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 171-173.

Holotype: C.A.S. 62250 (orig. no. E.H.T. 351); southern end Polillo Island, Philippine Islands; E. H. Taylor, July 12, 1920.

Philautus williamsi Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 167-169.

Holotype: C.A.S. 62253 (orig. no. E.H.T. 356); Polillo Island, Philippine Islands; E. H. Taylor, August 12, 1920.

Philautus zamboangensis Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 173-175.

Holotype: C.A.S. 61840 (orig. no. E.H.T. 1059); Pasananka, Zamboanga, Mindanao Island, Philippine Islands; E. H. Taylor, September 26, 1920.

Rana acanthi Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 523-525, pl. 2, fig. 1.

Holotype: C.A.S. 62577 (orig. no. E.H.T. 539); Busuanga, Busuanga Island, Calamian group, Philippine Islands; E. H. Taylor.

Rana igorota Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 260-262, pl. 3, fig. 1.

Holotype: C.A.S. 61484 (orig. no. E.H.T. F786); Balbalan, Kalinga Subprovince, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April 28, 1920.

Rana merrilli Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 164-166.

Holotype: C.A.S. 62448 (orig. no. E.H.T. F876); Burdeos, Polillo Island, Philippine Islands; E. H. Taylor, July 27, 1920.

Rana micrixalus Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 526-527, pl. 2, figs. 2-3.

Holotype: C.A.S. 60143 (orig. no. E.H.T. 1598A); Abungabung, Basilan Island, Philippine Islands; E. H. Taylor, October 20, 1920.

Rana tafti Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 265-267.

Holotype: C.A.S. 61819 (orig. no. E.H.T. 1849); mountains near the Pacific coast of Luzon, on the trail between Famy, Laguna Province, and Infanta, Tayabas Province, Luzon Island, Philippine Islands; L. H. Taft and F. X. Williams.

Rana taipehensis Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 56.

Holotype: C.A.S. 18007; Taipeh, Formosa; V. Kühne, March 8, 1909.

Rana woodworthi Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 519-522, pl. 1, figs. 1-2.

Holotype: C.A.S. 61000 (orig. no. E.H.T. 1921); Los Banos, Laguna Province, Luzon Island, Philippine Islands; E. H. Taylor, June 12, 1921.

Rana yakani Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 262-264, pl. 1, fig. 1, pl. 2, fig. 1.

Holotype: C.A.S. 60135 (orig. no. E.H.T. 1545); Abungabung, Basilan Island, Philippine Islands; E. H. Taylor, October 22, 1920.

Family Rhacophoridae

Polypedates linki Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 276-278, pl. 3, fig. 2.

Holotype: C.A.S. 60684 (orig. no. E.H.T. 1703); Jolo, Jolo Island, Sulu Archipelago, Philippine Islands; E. H. Taylor, November 10, 1920.

ORDER **SQUAMATA**
SUBORDER **SAURIA**

Family **Agamidae**

Japalura brevipes Gressitt, 1936.

Publ.: Proc. Biol. Soc. Washington, vol. 49, pp. 117-119.

Holotype: C.A.S. 71998; Bukai, near Horisha, central Formosa (altitude 1200 meters); J. L. Gressitt (?), June 15, 1934.

Japalura polygonata ishigakiensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 4, July 29, 1912.

Holotype: C.A.S. 21354; Ishigaki, Loo Choo Islands, Japan; V. Kühne, July 27, 1910.

Japalura polygonata miyakensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 4, July 29, 1912.

Holotype: C.A.S. 21353; Miyako, Loo Choo Islands, Japan; V. Kühne, July 27, 1910.

Family **Amphisbaenidae**

Amphisbaena heathi Schmidt, 1936.

Publ.: Herpetologica, vol. 1, no. 1, pp. 29-30, July 11.

Holotype: C.A.S. 49374 (orig. no. S.U. 6793); Baixa Verde, Rio Grande do Norte, Brazil; J. P. Heath, May 27, 1911.

Amphisbaena slevini Schmidt, 1936.

Publ.: Herpetologica, vol. 1, no. 1, p. 31, pl. 3, fig. 3.

Holotype: C.A.S. 49809; Manaos, Grao Para, Brazil; Baker-Mann, 1911.

Amphisbaena spixi Schmidt, 1936.

Publ.: Herpetologica, vol. 1, no. 1, pp. 30-31, pl. 3, fig. 2.

Holotype: C.A.S. 49423 (orig. no. S.U. 7072); Ceara Mirim, Rio Grande do Norte, Brazil; J. P. Heath, June 23, 1911.

Leposternon polystegoides Schmidt, 1936.

Publ.: Herpetologica, vol. 1, no. 1, pp. 31-32, pl. 3, fig. 4.

Holotype: C.A.S. 49866 (orig. no. 6240); Lake Papary, Rio Grande do Norte, Brazil; Baker-Mann, 1911.

Family **Anguidae**

Celestus hancocki Slevin, 1928.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 16, no. 21, pp. 682-684, pl. 26.

Holotype: C.A.S. 62582; Malpelo Island (lat. 3° 59' N., long. 81° 34' W.); J. R. Slevin, December 20, 1927.

Family **Gekkonidae**

Coleonyx variegatus slevini Klauber, 1945.

Publ.: Trans. San Diego Soc. Nat. Hist., vol. 10, pp. 167-171.

Holotype: C.A.S. 51697; South Santa Inez Island, Gulf of California, Mexico; J. R. Slevin, May 13, 1921.

Gekko porosus Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 185-187.

Holotype: C.A.S. 60526 (orig. no. E.H.T. —); Itbayat Island, Batan Islands, Philippine Islands; G. F. Lopez, November 21, 1921.

Gekko smaragdinus Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 187-190.

Holotype: C.A.S. 62336 (orig. no. E.H.T. 260); Polillo Island, Philippine Islands; E. H. Taylor, July 12, 1920.

Phyllodactylus barringtonensis Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, pp. 418-420.

Holotype: C.A.S. 12057; Barrington Island, Galapagos Archipelago; J. R. Slevin, July 10, 1906.

Phyllodactylus darwini Taylor, 1942.

Publ.: Univ. Kansas Sci. Bull., vol. 28, pt. 1, no. 6, pp. 104-108, fig. 4, a-d.

Holotype: C.A.S. 10848; Chatham Island, Galapagos Archipelago; J. R. Slevin, January 27, 1906.

Phyllodactylus galapagoensis daphnensis Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 425.

Holotype: C.A.S. 10539; Daphne Island, Galapagos Archipelago; J. R. Slevin, November 23, 1905.

Phyllodactylus galapagoensis duncanensis Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 426.

Holotype: C.A.S. 10600; Duncan Island, Galapagos Archipelago; J. R. Slevin, December 9, 1905.

Family **Iguanidae***Crotaphytus insularis* Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, pp. 95-96.

Holotype: C.A.S. 49151; east coast of Angel de la Guardia Island, 7 miles N. of Pond Island, Gulf of California, Mexico; J. R. Slevin, May 3, 1921.

Dipsosaurus carmenensis Van Denburgh, 1922.

Publ.: Occ. Pap. Calif. Acad. Sci., vol. 1, no. 10, pp. 81-82.

Holotype: C.A.S. 50504; Carmen Island, Gulf of California, Mexico; J. R. Slevin, May 21, 1921.

Dipsosaurus catalinensis Van Denburgh, 1922.

Publ.: Occ. Pap. Calif. Acad. Sci., vol. 1, no. 10, pp. 83-84.

Holotype: C.A.S. 50505; Santa Catalina Island, Gulf of California, Mexico; J. R. Slevin, June 21, 1921.

Dipsosaurus dorsalis lucasensis Van Denburgh, 1920.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 10, no. 4, pp. 33-34.

Holotype: C.A.S. 46090; San Jose de Cabo, Baja California, Mexico; J. R. Slevin, July 31, 1919.

Sauromalus slevini Van Denburgh, 1922.

Publ.: Occ. Pap. Calif. Acad. Sci., vol. 1, no. 10, pp. 97-99.

Holotype: C.A.S. 50503; south end of Monserrate Island, Baja California, Mexico; J. R. Slevin, May 25, 1921.

Sceloporus becki Van Denburgh, 1905.

Publ.: Proc. Calif. Acad. Sci., ser. 3, vol. 4, pp. 3, 9-10, pl. 4.

Holotype: C.A.S. 4537; San Miguel Island, Gulf of California, Mexico; R. H. Beck, May 26, 1903.

Sceloporus licki Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci.; ser. 2, vol. 5, pp. 110-114, pl. 10.

Holotype: C.A.S. 1436; Sierra San Lazaro, Baja California, Mexico; G. Eisen and F. Vaslit, September, 1894.

Neotype: (*Not valid.*) S.U. 2987; designated by H. Smith (1939; Proc. U.S.N.M.) to replace the C.A.S. specimen which he believed to have been lost in the earthquake and fire in San Francisco in 1906. The holotype, however, is still in existence, having been saved by Dr. Van Denburgh, and is present in the Academy's collections (see Leviton, 1953, *Herpetologica*, p. 128).

Sceloporus monserrattensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 396.

Holotype: C.A.S. 50509; Monserrate Island, Gulf of California, Mexico; J. R. Slevin, May 24, 1921.

Sceloporus obscurus Van Denburgh, 1897.

Publ.: Proc. Acad. Nat. Sci. Philadelphia, p. 462.

Holotype: C.A.S. 3213; Tepic, Nayarit, Mexico; G. Eisen and F. Vaslit, November, 1894.

Sceloporus scalaris stevini Smith, 1937.

Publ.: Occ. Pap. Mus. Zool. Univ. Michigan, no. 361, pp. 3-4.

Holotype: C.A.S. 48013; Miller Peak, Huachuca Mts., Cochise Co., Arizona; J. R. Slevin, August 23, 1920.

Uma notata cowlesi Heifetz, 1941.

Publ.: Copeia, pp. 104-106, fig. 5.

Holotype: C.A.S. 53370; shores of Tepoca Bay, Sonora, Mexico; J. R. Slevin, April 25, 1921.

Uta martinensis Van Denburgh, 1905.

Publ.: Proc. Calif. Acad. Sci., ser. 3, vol. 4, pp. 18-19, pl. 6.

Holotype: C.A.S. 4698; San Martin Island, Baja California, Mexico; R. H. Beck, May 3, 1903.

Uta nolascensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, pp. 395-396.

Holotype: C.A.S. 50508; San Pedro Nolasco Island, Gulf of California, Mexico; J. R. Slevin, April 17, 1921.

Uta repens Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 5, pp. 102-104, pls. 7-8, figs. a-e.

Holotype: C.A.S. 633; Comondu, Baja California, Mexico; W. E. Bryant, April, 1889.

Uta stevini Van Denburgh, 1922.

Publ.: Occ. Pap. Calif. Acad. Sci., vol. 1, no. 10, pp. 194-196.

Holotype: C.A.S. 50506; Mejia Island, Gulf of California, Mexico; J. R. Slevin, June 28, 1921.

Uta stellata Van Denburgh, 1905.

Publ.: Proc. Calif. Acad. Sci., ser. 3, vol. 4, pp. 21-22, pl. 8.

Holotype: C.A.S. 4704; San Benito Island, Baja California, Mexico; R. H. Beck, May 6, 1903.

Family Anguidae

Gerrhonotus cedrosensis Fitch, 1934.

Publ.: Copeia, no. 1, pp. 6-7.

Holotype: C.A.S. 56187; canyon on southeast side of Cedros Island, Baja California, Mexico; J. R. Slevin, July 23, 1922.

Gerrhonotus scincicauda ignavus Van Denburgh, 1905.

Publ.: Proc. Calif. Acad. Sci., ser. 3, vol. 4, pp. 19-21, pl. 7, figs. 1-2.

Holotype: C.A.S. 4699; San Martin Island, Baja California, Mexico; R. H. Beck, May 3, 1903.

Family Lacertidae

Takydromus kuehnei Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, p. 50.

Holotype: C. A. S. 18002; Kanshirei, Formosa; V. Kühne, March 27, 1909.

Takydromus sauteri Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, p. 50.

Holotype: C.A.S. 18001; Koshun, Formosa; V. Kühne.

Takydromus stejnegeri Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 8, July 29, 1912.

Holotype: C.A.S. 18417; Taipeh, Formosa; V. Kühne, March 10, 1909.

Family Scincidae

Eumeces barbouri Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 4, July 29, 1912.

Holotype: C.A.S. 21545; Amami O-shima, Rio Kiu Islands, Japan; V. Kühne, April 20-30, 1910.

Eumeces chinensis formosensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 6, July 29, 1912.

Holotype: C.A.S. 18605; San Shi Ka, Formosa; V. Kühne, April 14, 1909.

Eumeces gilberti rubricaudatus Taylor, 1935.

Publ.: Univ. Kansas Sci. Bull., vol. 23, pp. 446-451, figs. 72-73, pl. 39.

Holotype: C.A.S. 39002; Tehachapi Mts., Kern County, California; J. R. Slevin, April 8, 1914.

Eumeces ishigakiensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), pp. 5-6, July 29, 1912.

Holotype: C.A.S. 21666; Ishigaki-shima, Loo Choo Islands, Japan; V. Kühne, May 25-June 2, 1910.

Eumeces lagunensis Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 5, pp. 79, 134-135, pl. 13.

Holotype: C.A.S. 400 and 402 (Syntypes: San Francisquito, Sierra Laguna, Baja California, Mexico; G. Eisen, March 28, 1892. These specimens were lost during the earthquake and fire in San Francisco, 1906.

Neotype: U.S.N.M. 67398 (Smith, H. M., and Taylor, E. H., Bull. 199, U.S. Nat. Mus., pp. 167-168, 1950); San Francisquito, Sierra de la Laguna, Baja California, Mexico.

Eumeces marginatus amamiensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), pp. 4-5, July 29, 1912.

Holotype: C.A.S. 21615; Amami O-shima, Loo Choo Islands, Japan; V. Kühne, April 26-May 1, 1910.

Eumeces marginatus kikaigensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 5, July 29, 1912.

Holotype: C.A.S. 21628; Kikaiga-shima, Loo Choo Islands, Japan; V. Kühne, April 30, 1910.

Eumeces oshimensis Thompson, 1912.

Publ.: Herpetological notices, no. 2, p. 4 (Prodrome of descriptions of new species of reptilia and batrachia from the Far East), June 28, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 21729; Kikaiga-shima, Loo Choo Islands, Japan; V. Kühne, April 30, 1910.

Eumeces stimsonii Thompson, 1912.

Publ.: Herpetological notices, no. 2 (Prodrome of descriptions of new species of reptilia and batrachia from the Far East), p. 4, June 28, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 21645; Ishigaki Island, Loo Choo Islands, Japan; V. Kühne, May 25–June 2, 1910.

Leiopisma laterale boettgeri Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 7, July 29, 1912.

Holotype: C.A.S. 21678; Ishigaki-shima, Loo Choo Islands, Japan; V. Kühne, May 25–June 2, 1910.

Leiopisma laterale formosensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 7, July 29, 1912.

Holotype: C.A.S. 25027; Kanshirei, Formosa; V. Kühne, March 20, 1909.

Lygosoma incognita Thompson, 1912.

Publ.: Herpetological notices, no. 2 (Prodrome of descriptions of new species of reptilia and batrachia from the Far East), pp. 3–4, June 28, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 18700; Koshun, Formosa; V. Kühne, March, 1909.

Lygosoma formosensis Thompson, 1912.

Publ.: Herpetological notices, no. 2 (Prodrome of descriptions of new species of reptilia and batrachia from the Far East), p. 3, June 28, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 18627; Kanshirei, Formosa; V. Kühne, March, 1909.

Lygosoma laterale formosensis Thompson, 1912.

Publ.: Herpetological notices, no. 3 (On reptiles new to the island arcs of Asia), p. 2, July 31, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 25026; Kanshirei, Formosa; V. Kühne, March, 1909.

Lygosoma laterale ishigakiensis Thompson, 1912.

Publ.: Herpetological notices, no. 3 (On reptiles new to the island arcs of Asia), p. 2, July 31, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 21677; Ishigaki Island, Loo Choo Island, Japan; V. Kühne, May, 1910. Its present whereabouts is unknown.

Lygosoma okinavensis Thompson, 1912.

Publ.: Herpetological notices, no. 2 (Prodrome of descriptions of new species of reptilia and batrachia from the Far East), p. 4, June 28, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 21537; Okinawa Island, Loo Choo Islands, Japan; V. Kühne, May, 1910.

Lygosaurus pellopleurus browni Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 7, July 29, 1912.

Holotype, C.A.S. 21408; Amami O-shima, Loo Choo Islands, Japan; V. Kühne, April 26–May 1, 1910.

Mabuya bontocensis Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 532–534.

Holotype: C.A.S. 61331 (orig. no. E.H.T. 696); along mountain trail, Bontoc Subprovince, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April, 1920.

Mabuya heathi Schmidt and Inger, 1951.

Publ.: Chicago Mus. (Field Mus. Nat. Hist.), Zool. Ser., publ. no. 661.

Holotype: C.A.S. 49599 (orig. no. S.U. 6788); Fortaleza, Brazil; J. Health, 1911.

Siaphos herrei Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 194–196.

Holotype: C.A.S. 62262 (orig. no. E.H.T. 208); Polillo Island, Philippine Islands; E. H. Taylor, July, 1920.

Sphenomorphus bakeri Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 193–194.

Holotype: C.A.S. 61330 (orig. no. E.H.T. —); Haight's place, Pauai, Benguet, Mountain Province, Luzon Island, Philippine Islands; C. F. Baker, April, 1921.

Sphenomorphus beyeri Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 283–285.

Holotype: C.A.S. 61183 (orig. no. E.H.T. 17); Mount Banahao, Laguna Province, Luzon Island, Philippine Islands; E. H. Taylor, May 31, 1920.

Sphenomorphus boulengeri Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), pp. 6–7, July 29, 1912.

Holotype: C.A.S. 18700; Koshun, Formosa; V. Kühne, March 14, 1909.

Sphenomorphus indicus formosensis Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 6, July 29, 1912.

Holotype: C.A.S. 18622; Kanshirei, Formosa; V. Kühne, March 24, 1909.

Sphenomorphus stejnegeri Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 537–538.

Holotype: C.A.S. 61182 (orig. no. E.H.T. 16); Mount Banahao, Laguna Province, Luzon Island, Philippine Islands; E. H. Taylor, May 30, 1920.

Tropidophorus stejnegeri Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 285–287, pl. 4, fig. 1.

Holotype: C.A.S. 60230 (orig. no. E.H.T. 1538); Abungabung, Basilan Island, Philippine Islands; E. H. Taylor, October 22, 1920.

Family Teiidae

Cnemidophorus arizonae Van Denburgh, 1896.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 6, pp. 344–346, pl. 49.

Holotype: S.U. 2631; Fairbank, Cochise County, Arizona; W. W. Price, May 13,

1894. This specimen has been returned to Stanford University (see Leviton, 1953, *Herpetologica*, p. 129).

Cnemidophorus bacatus Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, p. 97.

Holotype: C.A.S. 49152; San Pedro Nolasco Island, Gulf of California, Mexico; J. R. Slevin, April 17, 1921.

Cnemidophorus canus Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, p. 97.

Holotype: C.A.S. 49153; Sal Si Puedes Island, Gulf of California, Mexico; J. R. Slevin, May 9, 1921.

Cnemidophorus catalinensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 396.

Holotype: C.A.S. 50507; Santa Catalina Island, Gulf of California, Mexico; J. R. Slevin, June 12, 1921.

Cnemidophorus dickersonae Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, pp. 97-98.

Holotype: C.A.S. 49154; Isla Partida, near Angel de la Guardia Island, Gulf of California; Mexico; J. R. Slevin, April 22, 1921.

Verticaria ceralbensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 396.

Holotype: C.A.S. 50510; Ceralbo Island, Gulf of California, Mexico; J. R. Slevin, June 6, 1921.

Verticaria espiritensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 397.

Holotype: C.A.S. 50511; Espiritu Santo Island, Gulf of California, Mexico; J. R. Slevin, June 1, 1921.

Verticaria franciscensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 397.

Holotype: C.A.S. 50513; San Francisco Island, Gulf of California, Mexico; J. R. Slevin, May 30, 1921.

Verticaria hyperythrus danheimae Burt, 1929.

Publ.: Proc. Biol. Soc. Washington, vol. 12, pp. 154-156.

Holotype: C.A.S. 435 (new name for *Verticaria sericea* Van Denburgh. The holotype of this species was lost in 1906. Refer to *V. sericea* for designation of neotype).

Verticaria hyperythrus schmidti Van Denburgh, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 397.

Holotype: C.A.S. 50512; San Marcos Island, Gulf of California, Mexico; J. R. Slevin, May 12, 1921.

Verticaria picta Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, p. 98.

Holotype: C.A.S. 49155; Monserrate Island, Gulf of California, Mexico; J. R. Slevin, May 25, 1921.

Verticaria sericea Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 5, pp. 132-133, pl. 12.

Holotype: C.A.S. 435; San Jose Island, Gulf of California, Mexico; W. E. Bryant, April, 1892. This specimen was lost in the earthquake and fire in San Francisco, 1906.

Neotype: C.A.S. 52555; San Jose Island, Gulf of California, Mexico; J. R. Slevin,

May 28, 1921. This specimen stands as the type of *V. hyperythrus danheimae* Burt, a substitute name for *V. sericea* (see Burt, Proc. Biol. Soc. Wash., vol. 12, pp. 154-156, 1929).

Family **Xantusiidae**

Xantusia gilberti Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 4, pp. 121-122, pl. 11.

Holotype: C.A.S. 401; San Francisquito, Sierra Laguna, Lower California, Mexico; G. Eisen, March 28, 1892.

SUBORDER **SERPENTES**

Family **Amblycephalidae**

Amblycephalus formosensis Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, p. 55.

Holotype: C.A.S. 18006; Kanshirei, Formosa; V. Kühne, March 27, 1909.

Family **Boidae**

Charina bottae utahensis Van Denburgh, 1920.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 10, no. 3, pp. 31-32.

Holotype: C.A.S. 38421; Little Cottonwood Canyon, Wasatch Mts., Wasatch County, Utah; J. R. Slevin, June 28, 1913.

Family **Colubridae**

Achalinus loochooensis Thompson, 1912.

Publ.: Herpetological notices, no. 3 (On reptiles new to the island arcs of Asia), p. 3, July 31, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 22064; Amami O-shima, Loo Choo Islands, Japan; V. Kühne, April 26-May 1, 1910.

Achalinus werneri Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 8, July 29, 1912.

Holotype: C.A.S. 22064; Nase, Amami O-shima, Loo Choo Islands, Japan; V. Kühne, April 26-May 1, 1910.

Bellophis zonatus Lockington, 1877.

Publ.: Proc. Calif. Acad. Sci., ser. 1, vol. 7, pp. 52-53.

Syntypes: C.A.S. 334-335; Santa Barbara, California; Paymaster Stanton, U.S.N.

This name was published as a new genus and a new species, but Lockington was not sure whether his snake was specifically identical with *Coluber zonatus* Blainville, and specifically states, "I have preserved (Blainville's) specific name of *zonatus*." The specimens of *B. zonatus* Lockington had been entered in the reptile register books of the Academy but had not been indicated as types. These specimens were destroyed in the 1906 fire, as recorded by Van Denburgh in a letter to Blanchard (1921:222, in footnote).

There is some discrepancy in locality data. Although Lockington states that the specimens came from "Northern California," they are recorded in the Academy's catalogues as being collected at Santa Barbara. Zweifel (Copeia, 1952:156) examined this problem and came to the conclusion that Lockington's published data is probably correct. The authors have listed Santa Barbara above since it is so recorded in the catalogues.

Calamaria hollandi Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 550-552.

Holotype: C.A.S. 60471 (orig. no. E.H.T. 1255); Port Holland, Basilan Island, Philippine Islands; E. H. Taylor, October, 1920.

Calamaria joloensis Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 203-204.

Holotype: C.A.S. 60901 (orig. no. E.H.T. 1855); central Jolo Island, Sulu Archipelago, Philippine Islands; E. H. Taylor, October 30, 1920.

Calamaria polillensis Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 549-550.

Holotype: C.A.S. 62455 (orig. no. E.H.T. 341A); Polillo, Polillo Island, Philippine Islands; E. H. Taylor, July, 1921.

Calamaria tropica Taylor, 1922.

Publ.: Snakes of the Philip. Islands, Philip. Bureau Sci., Manila; pp. 194-195.

Holotype: C.A.S. 62069 (orig. no. E.H.T. 887); low coastal mountains, near Naujan, Mindoro Island, Philippine Islands; E. H. Taylor, May 2, 1916.

Chilomeniscus punctatissimus Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, p. 98.

Holotype: C.A.S. 49156; Isla Partida-Espiritu Santo Island, Gulf of California, Mexico; J. C. Chamberlin, May 31, 1921.

Chionactis occipitalis talpina Klauber, 1951.

Publ.: Trans. San Diego Soc. Nat. Hist., vol. 11, no. 9, pp. 172-175, pl. 10, fig. 1.

Holotype: C.A.S. 81364; 50 mi. S. Goldfield, on the highway to Beatty, Nye County, Nevada; J. R. Slevin and W. Wood, June 3, 1947.

Coluber barbouri Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 6, p. 98.

Holotype: C.A.S. 49157; Isla Partida-Espiritu Santo Island, Gulf of California, Mexico; J. R. Slevin, May 30, 1921.

Cyclocorus nuchalis Taylor, 1923.

Publ.: Philip. Jour. Sci., vol. 22, no. 5, pp. 543-545, pl. 3, figs. 1-2.

Holotype: C.A.S. 62558 (orig. no. E.H.T. 1428); Pasananka, Zamboanga, Mindanao Island, Philippine Islands; E. H. Taylor, September 30, 1920.

Diadophis amabilis vandenburghi Blanchard, 1923.

Publ. Occ. Pap. Mus. Zool. Univ. Mich., no. 142, pp. 5-6, 8.

Holotype: C.A.S. 13748, collected by J. R. Slevin, June 20, 1907; Carmel, Monterey County, California.

Diadophis anthonyi Van Denburgh and Slevin, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 13, no. 1, p. 1.

Holotype: C.A.S. 56766; South Todos Santos Island, Baja California, Mexico.

Dromicus hoodensis Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, pp. 338-341, pl. 24.

Holotype: C.A.S. 11799; Hood Island, Galapagos Archipelago; J. R. Slevin, June 23, 1906.

Dromicus occidentalis Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, pp. 347-349, pl. 27.

Holotype: C.A.S. 11488; Narborough Island, Galapagos Archipelago; J. R. Slevin, April 18, 1906.

Dromicus occidentalis helleri Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, pp. 349-351, pl. 28.

Holotype: C.A.S. 10280; Brattle Island, Galapagos Archipelago; J. R. Slevin, October 30, 1905.

Dromicus slevini Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, pp. 351-353, pl. 29.

Holotype: C.A.S. 12216; Duncan Island, Galapagos Archipelago; J. R. Slevin, August 14, 1906.

Dromicus steindachneri Van Denburgh, 1912.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, pp. 353-355, pl. 20.

Holotype: C.A.S. 10795; Indefatigable Island, Galapagos Archipelago; J. R. Slevin, January 16, 1906.

Dryocalamus merroryi Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 197-199.

Holotype: C.A.S. 60346 (orig. no. E.H.T. 1517); Abungabung, Basilan Island, Philippine Islands; E. H. Taylor, October 23, 1920.

Eudryas slevini Stuart, 1933.

Publ.: Occ. Pap. Mus. Zool. Univ. Michigan, no. 254, pp. 9-10.

Holotype: C.A.S. 58679; Maria Madre Island, Las Tres Marias Islands, Mexico; J. R. Slevin, May 17, 1925.

Hydromorphus dunnii Slevin, 1942.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 23, no. 32, p. 474.

Holotype: C.A.S. 78939; vicinity N. of Boquete, Chiriquí Province, Panama; J. R. Slevin, July 30, 1939.

Hypsiglena ochrorhynchus tortugaensis Tanner (W.W.), 1944.

Publ.: The Great Basin Naturalist, vol. 5, nos. 3 and 4, pp. 69-71.

Holotype: C.A.S. 51460; Tortuga Island, Gulf of California, Mexico; J. R. Slevin, June 22, 1921.

Hypsiglena slevini Tanner (W.W.), 1943.

Publ.: The Great Basin Naturalist, vol. 4, pp. 53-54.

Holotype: C.A.S. 53631; Puerto Escondido, Baja California, Mexico; J. R. Slevin, June 14, 1921.

Hypsiglena torquata gularis Tanner (W.W.), 1954.

Publ.: Herpetologica, vol. 10, part 1, pp. 54-56.

Holotype: C.A.S. 51010; Isla Partida, Baja California, Mexico; J. R. Slevin, April 22, 1921.

Lampropeltis agalma Van Denburgh and Slevin, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 13, p. 2.

Holotype: C.A.S. 56865; Alcatraz, San Pedro Martir Mts., Baja California, Mexico; Expedition to Southern and Lower California, June 16, 1923.

Lampropeltis catalinensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, pp. 397-398.

Holotype: C.A.S. 50514; Santa Catalina Island, Gulf of California, Mexico; J. R. Slevin, June 12, 1921.

Lampropeltis herrerae Van Denburgh and Slevin, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 13, p. 2.

Holotype: C.A.S. 56755; South Todos Santos Island, Baja California, Mexico; Expedition to Southern and Lower California, July 10, 1923.

Lampropeltis nitida Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 3, pp. 143-144, pl. 14.

Holotype: C.A.S. 800; San Jose del Cabo, Baja California, Mexico; G. Eisen, September, 1893. This specimen was lost in the earthquake and fire in San Francisco, 1906.

Neotype: U.S.N.M. 64585; Miraflores, Baja California, Mexico; C. H. Townsend, May, 1911. (This specimen was formerly in the collections of the American Museum of Natural History, number 5648.)

Lycodon subcinctus sealei Leviton, 1955.

Publ.: Philip. Jour. Sci., vol. 84, no. 2, pp. 195-198.

Holotype: C.A.S. 15819; Puerto Princesa, Palawan Island, Philippine Islands; A. Seale, February 20, 1908.

Natrix barbouri Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 3, pp. 291-293.

Holotype: C.A.S. 61552 (orig. no. E.H.T. 939); Balbalan, Kalinga Subprovince, Luzon Island, Philippine Islands; E. H. Taylor, April 26, 1920.

Natrix copei Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, pp. 52-53.

Holotype: C.A.S. 18004; Kanshirei, Formosa, V. Kühne, March 24, 1909.

Natrix vibakari ruthveni Van Denburgh, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 13, no. 2, pp. 3-4.

Holotype: C.A.S. 31487; Fusan, Kjong-Sang-Do Province, Korea; V. Kühne, May 8, 1911.

Oligodon iwahigensis Griffin, 1909.

Publ.: Philip. Jour. Sci., vol. 8, p. 598.

Holotype: Bureau Sci. Manila R 16; Iwahig, Palawan Island, Philippine Islands. This specimen appears to have been destroyed during World War II in the fire which consumed the Bureau of Science building in Manila.

Neotype: C.A.S. 62173 (orig. no. Bureau of Science R 923); Iwahig, Palawan Island, Philippine Islands; E. H. Taylor.

Oligodon ornatus Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, pp. 53-54.

Holotype: C.A.S. 18005; Shinchiku, Formosa; V. Kühne, March 7, 1909.

Pituophis catenifer insularis Klauber, 1946.

Publ.: Trans. San Diego Soc. Nat. Hist., vol. 11, no. 1, pp. 11-14, pl. 1, fig. 1.

Holotype: C.A.S. 56353; Cedros Island, off west coast of Baja California, Mexico; J. R. Slevin, August 7, 1922.

Pituophis catenifer rutilus Van Denburgh, 1920.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 10, pp. 24-27, pl. 2, fig. 2.

Holotype: C.A.S. 33869; Tucson, Pima County, Arizona; J. R. Slevin, April 11, 1912.

Pituophis catenifer stejnegeri Van Denburgh, 1920.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 10, pp. 21-24, pl. 21, fig. 1.

Holotype: C.A.S. 14203; Fort Douglas, Salt Lake County, Utah; J. C. Clemens, June-July, 1908.

Pseudagkistrodon carinatus Van Denburgh, 1909.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, pp. 51-52.

Holotype: C.A.S. 18003; Formosa; V. Kühne, March 27, 1909.

Pseudorhabdium minutum Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 200-202.

Holotype: C.A.S. 61544 (orig. no. E.H.T. F772); Balbalan, Kalinga Subprovince, Mountain Province, Luzon Island, Philippine Islands; E. H. Taylor, April 25, 1920.

Pseudoxenodon popei Gressitt, 1936.

Publ.: Proc. Biol. Soc. Washington, vol. 49, pp. 119-121.

Holotype: C.A.S. 71997; Loi Mother Mts., altitude 1450 meters, central part of Hainan Island; J. L. Gressitt, July 26, 1935.

Tantilla nelsoni Slevin, 1926.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 15, pp. 200-201.

Holotype: C.A.S. 58880; Maria Madre Island, Tres Marias Islands, Mexico. This specimen was lost while on transit in the mails.

Tantilla utahensis Blanchard, 1938.

Publ.: Field Mus. Nat. Hist., Zool. Ser., vol. 20, no. 28, pp. 372-373.

Holotype: C.A.S. 55214; St. George, Washington County, Utah; V. M. Tanner.

Thamnophis ordinoides hueyi Van Denburgh and Slevin, 1923.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 13, p. 2.

Holotype: C.A.S. 56855; Arroyo Encantada, between La Grulla and La Encantada, Sierra San Pedro Martir, northern Baja California, Mexico; Expedition to Southern and Lower California, June 13-15, 1923.

Trimetopon posadasi Slevin, 1936.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 23, no. 4, pp. 79-81.

Holotype: C.A.S. 66964; southern slope Volcan Zunil, Suchitepequez, Guatemala; J. R. Slevin, August 8, 1924.

Trimetopon slevini Dunn, 1940.

Publ.: Proc. Acad. Nat. Sci. Phil., vol. 92, pp. 117-118.

Holotype: C.A.S. 78938, Boquete, Panama; J. R. Slevin, July 20, 1939.

Trimorphodon raudenburghi Klauber, 1924.

Publ.: Bull. Zool. Soc. San Diego, no. 1, p. 17.

Holotype: C.A.S. 58172; Wildwood ranch, alt. 1520 ft., 5 mi. SW of Ramona, San Diego County, California; E. Woodworth and L. M. Klauber, May 4, 1924.

Typhlogeophis ater Taylor, 1922.

Publ.: Philip. Jour. Sci., vol. 21, no. 2, pp. 202-203.

Holotype: C.A.S. 62643 (orig. no. E.H.T. 1103); Pasananka, Zamboanga, Mindanao Island, Philippine Islands; E. H. Taylor, September 28, 1920.

Family Crotalidae

Crotalus lucasensis Van Denburgh, 1920.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 10, no. 2, pp. 29-30, pl. 3.

Holotype: C.A.S. 45888; Agua Caliente, Cape region of Baja California, Mexico; J. R. Slevin, July 26, 1919.

Crotalus tortugensis Van Denburgh and Slevin, 1921.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 11, no. 17, p. 398.

Holotype: C.A.S. 50515; Tortuga Island, Gulf of California, Mexico; J. R. Slevin, June 22, 1921.

Family Elapidae

Callophis formosensis Thompson, 1912.

Publ.: Herpetological notices, no. 3 (On reptiles new to the island arcs of Asia), p. 4, July 31, 1912 (privately printed: San Francisco).

Holotype: C.A.S. 18864, Kosempo, Formosa; V. Kühne, March 14, 1909. Its present whereabouts is unknown.

Callophis swinhoei Van Denburgh, 1912.

Publ.: Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa (privately printed: San Francisco), p. 8, July 29, 1912.

Holotype: C.A.S. 14978; Suisahako, central Formosa; V. Kühne, October 5, 1907.

Glyphodon barnardi Kinghorn, 1939.

Publ.: Rec. Aust. Mus., vol. 20, no. 4, p. 258.

Holotype: C.A.S. 77798; 15 miles S. Duaringa, Queensland, Australia; C. Barnard, 1936.

Micrurus nigrocinctus zunilensis Schmidt, 1932.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 20, pp. 263-267.

Holotype: C.A.S. 66001; Finca El Cipres, Volcan Zunil, Suchitepequez, Guatemala; J. R. Slevin, June 1, 1926.

Family Hydrophidae

Disteira cincinnatii Van Denburgh and Thompson, 1908.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 3, pp. 41-48, pl. 7.

Holotype: C.A.S. 15016; one mile NE Cavite, Manila Bay, Luzon Island, Philippine Islands; J. C. Thompson, December 20, 1906.

Laticauda crockeri Slevin, 1934.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 21, no. 15, pp. 186-187.

Holotype: C.A.S. 72001; Lake Tungano, Rennell Island, Solomon Islands; crew of the "Zaca," June 8, 1933.

Family Leptotyphlopidae

Leptotyphlops humilis slevini Klauber, 1931.

Publ.: Trans. San Diego Soc. Nat. Hist., vol. 6, no. 23, pp. 338-339.

Holotype: C.A.S. 53721; La Paz, Baja California, Mexico; J. R. Slevin, June 2, 1921.

Leptotyphlops subcrotila Klauber, 1939.

Publ.: Trans. San Diego Soc. Nat. Hist., vol. 9, no. 14, pp. 61-62, figs. 2a-2b.

Holotype: C.A.S. 14554; Grau Tombes, northern Peru; G. Baer, 1902.

ORDER TESTUDINATA

Family Emyidae

Chrysemys nebulosa Van Denburgh, 1895.

Publ.: Proc. Calif. Acad. Sci., ser. 2, vol. 5, pp. 84-85, pls. 4-6.

Holotype: C.A.S. 2244; mainland abreast of San Jose Island, Baja California, Mexico; W. E. Bryant.

Family Testudinidae

Testudo chatamensis Van Denburgh, 1907.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 4.

Holotype: C.A.S. 8127; Chatham Island, Galapagos Archipelago; R. H. Beck and J. R. Slevin, February 12-14, 1906.

Testudo darwini Van Denburgh, 1907.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 4.

Holotype: C.A.S. 8108; James Island, Galapagos Archipelago; R. H. Beck and J. R. Slevin, July 31, 1906.

Testudo hoodensis Van Denburgh, 1907.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 3.

Holotype: C.A.S. 8121; Hood Island, Galapagos Archipelago; J. R. Slevin and E. S. King, June 27, 1906.

Testudo phantasticus Van Denburgh, 1907.

Publ.: Proc. Calif. Acad. Sci., ser. 4, vol. 1, p. 4.

Holotype: C.A.S. 8101; Narborough Island, Galapagos Archipelago; R. H. Beck, April 5, 1906.

Testudo randenburghi De Sola, 1930.

Publ.: Copeia, 1930, no. 3, pp. 79-80 (see also Van Denburgh, Proc. Calif. Acad. Sci., ser. 4, vol. 2, pt. 1, pp. 362-365, pls. 122-123, 1914).

Holotype: C.A.S. 8141; Cowley Mt., Albemarle Island, Galapagos Archipelago; R. H. Beck, August 10-11, 1906.

BIBLIOGRAPHY OF JOHN VAN DENBURGH

(1872-1924)

Curator of Herpetology, California Academy of Sciences 1895-1924

1. 1888. Two large sets of quail eggs. *The Oologist*, vol. 5, nos. 10-11, p. 156, October-November.
2. 1891. Anna's hummingbird. *The Bittern*, vol. 1, no. 6, p. 3, April-May.
3. 1894. Annotated list of reptiles and batrachians. In: Report of the Commissioner of Fish and Fisheries on Investigations in the Columbia River Basin in regard to the Salmon Fisheries. Washington, D.C., pp. 56-57.
4. — Descriptions of three new lizards from California and Lower California, with a note on *Phrynosoma blainvillii*. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 4, pp. 296-301, July 12.
5. — Notes on "*Crotalus mitchellii* and *Crotalus pyrrhus*." *Proceedings of the California Academy of Sciences*, ser. 2, vol. 4, pp. 450-455, September 25.
6. — *Phrynosoma solaris*, with a note on its distribution. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 4, p. 456, September 25.
7. 1895. A review of the herpetology of Lower California. Part I. Reptiles. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 5, pp. 77-162, pls. 4-14, May 28.
8. — The species of the genus *Xantusia*. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 5, pp. 523-534, August 28.
9. — A review of the herpetology of Lower California. Part II. Batrachians. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 5, pp. 556-561, September 10.
10. — Notes on the habits and distribution of *Autodax ifcanus*. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 5, pp. 776-778, October 30.
11. 1895. Description of a new rattlesnake (*Crotalus pricei*) from Arizona. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 5, pp. 856-857, December 30.
12. 1896. Additional notes on the herpetology of Lower California. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 5, pp. 1004-1008, January 15.

13. — A list of some reptiles from southeastern Arizona, with a description of a new species of *Cnemidophorus*. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 6, pp. 338-349, pls. 49-50, August 18.
14. — Description of a new lizard (*Eumeces gilberti*) from the Sierra Nevada of California. *Proceedings of the California Academy of Sciences*, ser. 2, vol. 6, pp. 350-352, August 28.
15. 1897. Reptiles from Sonora, Sinaloa, and Jalisco, Mexico, with a description of a new species of *Sceloporus*. *Proceedings of the Academy of Natural Sciences, Philadelphia*, pp. 460-464, November.
16. — Some experiments with the saliva of the gila monster (*Heloderma suspectum*). *Proceedings of the American Philosophical Society*, pp. 199-220, November.
17. — The reptiles of the Pacific Coast and Great Basin. *Occasional Papers of the California Academy of Sciences*, no. 5, 236 pp., June (issued September 4).
18. 1898. The *Gerrhonotus* of the San Lucan fauna, Lower California, with diagnoses of other West American species. *Proceedings of the Academy of Natural Sciences, Philadelphia*, pp. 63-66.
19. — Birds observed in central California in the summer of 1893. *Proceedings of the Academy of Natural Sciences, Philadelphia*, pp. 206-218, April.
20. — Herpetological notes. *Proceedings of the American Philosophical Society*, vol. 37, no. 157, pp. 139-141.
21. 1899. Notes on some birds of Santa Clara County, California. *Proceedings of the American Philosophical Society*, vol. 38, no. 160, pp. 157-180.
22. 1900. ——— and WRIGHT, OTIS B. On the physiological action of the poisonous secretion of the gila monster (*Heloderma suspectum*). *American Journal of Physiology*, vol. 4, no. 5, pp. 209-238, September.
23. 1905. The reptiles and amphibians of the islands of the Pacific Coast of North America from the Farallons to Cape San Lucas and the Revilla Gigedos. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 4, no. 1, pp. 1-41, 8 pls., June 13 (issued: June 15).
24. — The species of the reptilian genus *Anniella*, with especial reference to *Anniella texana* and to variation in *Anniella nigra*. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 4, no. 2, pp. 41-49, November 29 (issued: December 2).
25. — On the occurrence of the leather-back turtle, *Dermochelys*, on the coast of California. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 4, no. 3, pp. 51-61, pls. 9-11, November 29 (issued: December 2).
26. 1906. Description of a new species of the genus *Plethodon* (*Plethodon vandykei*) from Mount Rainier, Washington. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 4, no. 4, pp. 61-63, March 12 (issued: March 14).
27. — On the occurrence of the spotted night snake, *Hypsiglena ochrorhynchus*, in central California; and on the shape of the pupil in the reptilian genus *Arizona*. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 4, no. 5, pp. 65-67, March 12 (issued: March 14).

28. 1907. Preliminary descriptions of four new racers of gigantic land tortoises from the Galapagos Islands. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 1, pp. 1-6, December 19 (issued: December 20).
29. 1908. ——— and THOMPSON, JOSEPH C. Description of a new species of sea snake from the Philippine Islands, with a note on the palatine teeth in the proteroglypha. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 41-48, December 31.
30. 1909. New and previously unrecorded species of reptiles and amphibians from the island of Formosa. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 49-56, December 20.
31. 1912. Notes on a collection of reptiles from southern California and Arizona. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 147-154, January 15 (issued: January 17).
32. 1912. Notes on some reptiles and amphibians from Oregon, Idaho, and Utah. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 155-160, January 15 (issued: January 17).
33. ——— The snakes of the Galapagos Islands. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 1, no. 4, pp. 323-374, pls. 22-30, January 15 (issued: January 17).
34. ——— The geckos of the Galapagos Archipelago. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 1, no. 6, pp. 405-430, April 12 (issued: April 16).
35. ——— Advance diagnoses of new reptiles and amphibians from the Loo Choo Islands and Formosa. Privately printed; San Francisco. 8 pp., July 29.
36. ——— Concerning certain species of reptiles and amphibians from China, Japan, the Loo Choo Islands, and Formosa. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 187-258, December 13 (issued: December 16).
37. ——— Notes on *Ascaphus*, the discoglossid toad of North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 259-264, 1 fig., December 20 (issued: December 21).
38. 1913 ——— and SLEVIN, JOSEPH R. The Galapagoan lizards of the genus *Tropidurus*: with notes on the iguanas of the genera *Conolophus* and *Amblyrhynchus*. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 2, part 1, no. 9, pp. 133-202, pls. 8-11, September 17 (issued: September 19).
39. ——— and SLEVIN, JOSEPH R. A list of the amphibians and reptiles of Arizona, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 391-454, pls. 17-28, November 3 (issued: November 5).
40. ——— Review of Loeb's "The venom of *Heloderma*." *Science*, new ser., vol. 38, no. 991, pp. 931-932, December 26.
41. 1914. The gigantic land tortoises of the Galapagos Archipelago. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 2, part 1, pp. 203-374, pls. 12-124, September 30.
42. 1914. ——— and SLEVIN, JOSEPH R. Reptiles and amphibians of the islands of the West Coast of North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 4, no. 5, pp. 129-152, December 30.

43. 1915. ———— and SLEVIN, JOSEPH R. A list of the amphibians and reptiles of Utah, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 5, no. 4, pp. 99-110, pls. 12-14, June 15.
44. 1916. On the probable origin of the type specimen of Cope's *Xantusia picta*. *Copeia*, no. 27, pp. 14-15, February 24.
45. ———— Four species of salamanders new to the State of California, with a description of *Plethodon elongatus*, a new species, and notes on other salamanders. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 6, no. 7, pp. 215-221, May 12.
46. 1917. Report of the Department of Herpetology for 1916. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 6, no. 9, pp. 253-254, June 23.
47. ———— Notes on the herpetology of Guam, Marianas Islands. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 7, no. 3, pp. 37-39, July 23.
48. ———— Concerning the origin of the soft-shelled turtle, *Aspidoonectes californiana* Rivers. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 7, no. 2, pp. 33-35, July 23.
49. 1918. Report of the Department of Herpetology for 1917. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 7, no. 13, pp. 351-352, June 15.
50. ———— and SLEVIN, JOSEPH R. The garter snakes of western North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 8, no. 6, pp. 181-270, pls. 7-17, October 18.
51. 1919. Nesting of the western willet in California. *Condor*, vol. 21, no. 1, pp. 39-40, Jan.-Feb.
52. 1919. Report of the Department of Herpetology for 1918. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 8, no. 9, pp. 335-337, June 16.
53. ———— and SLEVIN, JOSEPH R. The gopher snakes of western North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 9, no. 6, pp. 197-220, pls. 11-13, August 21.
54. ———— A note on *Xantusia riversiana*. *Copeia*, no. 75, pp. 91-92, November 20.
55. 1920. Mr. Boulenger on the genus *Babina*. *Copeia*, no. 79, pp. 14-16, February 27.
56. ———— Report of the Department of Herpetology for 1919. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 9, no. 15, pp. 384-385, August 4.
57. ———— A further study of variation in the gopher snakes of western North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 10, no. 1, pp. 1-27, pls. 1-2, August 6.
58. ———— Description of a new species of rattlesnake (*Crotalus lucasensis*) from Lower California. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 10, no. 2, pp. 29-30, pl. 3, August 6.
59. ———— Description of a new subspecies of boa (*Charina bottae utahensis*) from Utah. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 10, no. 3, pp. 31-32, August 6.
60. ———— Description of a new lizard (*Dipsosaurus dorsalis lucasensis*) from Lower California. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 10, no. 4, pp. 33-34, August 6.

61. 1921. Report of the Department of Herpetology for 1920. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 10, no. 12, pp. 141-142, July 2.
62. ——— and SLEVIN, JOSEPH R. A list of the amphibians and reptiles of Nevada, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 2, pp. 27-38, July 8.
63. 1921. ——— and SLEVIN, JOSEPH R. A list of the amphibians and reptiles of Idaho, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 3, pp. 39-47, July 8.
64. ——— and SLEVIN, JOSEPH R. A list of the reptiles and amphibians of the peninsula of Lower California, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 4, pp. 49-72, July 8.
65. ——— and SLEVIN, JOSEPH R. Preliminary diagnoses of the new species of reptiles from the islands in the Gulf of California, Mexico. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 6, pp. 95-98, July 30.
66. ——— and SLEVIN, JOSEPH R. Preliminary diagnoses of more new species of reptiles from the islands in the Gulf of California, Mexico. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 17, pp. 395-398, December 17.
67. 1922. A fourth specimen of a rare snake from Texas. *Copeia*, no. 104, p. 24, March 20.
68. ——— An unusual type of abnormal coloration in lizards. *Copeia*, no. 106, pp. 38-39, May 30.
69. ——— Report of the Department of Herpetology for 1921. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 21, pp. 631-632, August 21.
70. ——— The reptiles of western North America. *Occasional Papers of the California Academy of Sciences*, 2 vols., 1028 pp., 128 pls., November 23.
71. 1923. ——— and SLEVIN, JOSEPH R. Preliminary diagnoses of four new snakes from Lower California, Mexico. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 1, pp. 1-2, July 25.
72. ——— A new subspecies of watersnake (*Natrix vibakari ruthveni*) from eastern Asia. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 2, pp. 3-4, July 26.
73. ——— Report of the Department of Herpetology for 1922. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 23, pp. 679-680, August 22.
74. 1924. Notes on the herpetology of New Mexico, with a list of species known from that state. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 12, pp. 189-230, March 18.
75. ——— The birds of the Todos Santos Islands. *Condor*, vol. 26, no. 2, pp. 67-71, March-April.
76. ——— A fifth record of the Pacific leather-back turtle on the coast of California. *Copeia*, no. 130, p. 53, May 31.

77. — Contributions to Oriental herpetology, I. Sakhalin. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 15, pp. 243-246, November 6.
78. — On *Laticauda schistorhynchus* and *Laticauda semifasciata*. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 16, pp. 247-248, November 6.
79. — Report of the Department of Herpetology for 1923. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 12, no. 33, p. 1263.

BIBLIOGRAPHY OF JOSEPH RICHARD SLEVIN

Curator of Herpetology, California Academy of Sciences, 1925-

1. 1913. VAN DENBURGH, JOHN, and ————. The Galapagos lizards of the genus *Tropidurus*: with notes on the iguanas of the genera *Conolophus* and *Amblyrhynchus*. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 2, part 1, no. 9, pp. 133-202, pls. 8-11, September 17 (issued: September 19).
2. — VAN DENBURGH, JOHN, and ————. A list of the amphibians and reptiles of Arizona, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 3, pp. 391-454, pls. 17-28, November 3 (issued: November 5).
3. 1914. VAN DENBURGH, JOHN, and ————. Reptiles and amphibians of the islands of the West Coast of North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 4, no. 5, pp. 129-152, December 30.
4. 1915. VAN DENBURGH, JOHN, and ————. A list of the amphibians and reptiles of Utah, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 5, no. 4, pp. 99-110, pls. 12-14, June 15.
5. 1918. VAN DENBURGH, JOHN, and ————. The garter snakes of western North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 8, no. 6, pp. 181-270, pls. 7-17, October 18.
6. 1919. VAN DENBURGH, JOHN, and ————. The gopher snakes of western North America. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 9, no. 6, pp. 197-220, pls. 11-13, August 21.
7. 1921. VAN DENBURGH, JOHN, and ————. A list of the amphibians and reptiles of Nevada, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 2, pp. 27-38, July 8.
8. 1921. VAN DENBURGH, JOHN, and ————. List of the amphibians and reptiles of Idaho, with notes on the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 3, pp. 39-47, July 8.
9. — VAN DENBURGH, JOHN, and ————. A list of the reptiles and amphibians of the peninsula of Lower California, with notes on the species in the collection of the Academy. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 4, pp. 49-72, July 8.

10. — VAN DENBURGH, JOHN, and ————. Preliminary diagnoses of new species of reptiles from the islands in the Gulf of California, Mexico. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 6, pp. 95-98, July 30.
11. — VAN DENBURGH, JOHN, and ————. Preliminary diagnoses of more new species of reptiles from islands in the Gulf of California, Mexico. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 11, no. 17, pp. 395-398, December 17.
12. 1923. Expedition of the California Academy of Sciences to the Gulf of California in 1921. General account. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 12, no. 6, pp. 55-72, 1 map, June 2.
13. — VAN DENBURGH, JOHN, and ————. Preliminary diagnoses of four new snakes from Lower California, Mexico. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 1, pp. 1-2, July 25.
14. 1925. Annual report, Department of Herpetology for the year 1924. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 13, no. 28, p. 473, May 29.
15. — Contributions to Oriental herpetology. II. Korea or Chosen. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 14, no. 5, pp. 89-100, July 23.
16. — Contributions to Oriental herpetology. III. Russian Asia and Manchuria. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 14, no. 6, pp. 101-103, July 23.
17. 1926. Expedition to the Revillagigedo Islands, Mexico, in 1925. III. Notes on a collection of reptiles and amphibians from the Tres Marias and Revillagigedo Islands, and west coast of Mexico, with description of a new species of *Tantilla*. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 15, no. 3, pp. 195-207, pl. 22, April 26.
18. — Annual report, Department of Herpetology for the year 1925. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 14, no. 20, p. 542, April 28.
19. 1927. An additional record of the leather-back turtle on the coast of California. *Copeia*, no. 159, pp. 172-173, January 11.
20. — Annual report, Department of Herpetology for the year 1926. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 15, no. 18, pp. 534-535, March 31.
21. — The making of a scientific collection of reptiles and amphibians. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 16, no. 9, pp. 231-259, pls. 15-16, April 22.
22. 1928. Description of a new species of lizard from Malpelo Island. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 16, no. 21, pp. 681-684, pls. 25-26, February 28.
23. — The amphibians of western North America. *Occasional Papers, California Academy of Sciences*, vol. 16, 152 pp., 23 pls.
24. 1929. A contribution to our knowledge of the nesting habits of the golden eagle. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 18, no. 3, pp. 45-71, pls. 4-7, January 29.

25. 1930. Contributions to Oriental herpetology. IV. Hokushu or Yezo. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 19, no. 10, pp. 105-108, July 15.
26. — Further notes on the genus *Ensatina*. *Copeia*, no. 3, pp. 77-78, September 30.
27. — A note on the discovery of the genus *Typhlops* in the Hawaiian Islands. *Copeia*, no. 4, p. 158.
28. 1931. A tank designed to overcome the difficulties met in making a collection of alcoholics. *The Museum News*, vol. 8, no. 17, p. 12, March 1.
29. — Range extension of certain western species of reptiles and amphibians. *Copeia*, no. 3, pp. 140-141, October.
30. 1932. The yellow-bellied sea snake. *The Aquarium Journal*, vol. 5, no. 8, p. 46, October 6.
31. 1934. A handbook of reptiles and amphibians of the Pacific States including certain Eastern species. Specially adapted to the use of the nature student. Special Publication, California Academy of Sciences, 73 pp.
32. — The Templeton Crocker expedition to western Polynesian and Melanesian islands, 1933. No. 15. Notes on the reptiles and amphibians, with the description of a new species of sea snake. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 21, no. 15, pp. 183-188, October 16.
33. 1935. An account of the reptiles inhabiting the Galapagos Islands. *Bulletin of the New York Zoological Society*, vol. 38, no. 1, pp. 2-24, January-February.
34. — Outposts of Baja California; desert islands where a vanishing fauna is making a valiant struggle to survive. *Natural History*, vol. 37, no. 6, pp. 65-73, June.
35. — An equatorial wonderland. The Galapagos—a country of great volcanoes, giant tortoises, and flightless birds. *Natural History*, vol. 36, pp. 374-388, December.
36. 1936. Tame "waterfowl" of the Galapagos Islands: An archipelago where the unique avifauna lives unmolested by man. *The Illustrated London News*, vol. 188, no. 5065, pp. 873-875, May 16.
37. — A new Central American snake. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 23, no. 4, pp. 79-81, August 12.
38. 1937. John Marshall Gamble. *Paradise of the Pacific*, vol. 49, no. 7, July.
39. 1937. Contributions to Oriental herpetology, V. Honshu or Hondo, the neighboring islands of Sado and Awaji, and the seven islands of Idzu. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 23, no. 11, pp. 175-190, December 30.
40. 1939. Notes on a collection of reptiles and amphibians from Guatemala. I. Snakes. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 23, no. 26, pp. 393-414, pls. 37-38, December, 29.
41. 1940. "Lost grave of Cowan on Galapagos." *Paradise of the Pacific*, vol. 52, no. 6, pp. 25-26, June.

42. — Wildlife disappearing from Cedros, the largest of Baja California's coastal islands is meeting the same fate as its neighbor Guadalupe. *Bulletin of the New York Zoological Society*, vol. 43, no. 6, pp. 192-196, November-December.
43. 1941. Swift desert beauties. Some interesting lizards of the arid Southwest. *Nature Magazine*, vol. 34, no. 2, pp. 73-76, February.
44. 1942. Notes on a collection of reptiles and amphibians from Guatemala. II. Lizards. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 23, no. 31, pp. 453-462, June 25.
45. — Notes on a collection of reptiles from Boquete, Panama, with the description of a new species of *Hydromorphus*. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 23, no. 32, pp. 463-480, pls. 39-42, June 25.
46. — In the Australian bush. *Nature Magazine*, vol. 35, no. 9, pp. 473-476, November.
47. 1946. A visit to the crater of the Volcan Chiriquí. *Herpetologica*, vol. 3, part 2, pp. 62-63, February 23.
48. 1947. An abnormal condition in the transparent spectacle of a coast gopher snake. *Herpetologica*, vol. 4, part 1, p. 30, September 17.
49. 1948. A reptile hunter's Australia. *Pacific Discovery*, vol. 1, no. 5, pp. 20-28, September-October.
50. 1949. Range extension of *Xantusia vigilis*. *Herpetologica*, vol. 5, part 6, p. 148, December 15.
51. 1950. A remarkable concentration of desert snakes. *Herpetologica*, vol. 6, part 1, pp. 12-13, March 8.
52. — Post office in a barrel. *Pacific Discovery*, vol. 3, no. 2, pp. 28-29, March-April.
53. 1951. A high birthrate for *Natrix sipedon sipedon*. *Herpetologica*, vol. 7, part 3, p. 132, September 13.
54. — The San Felipe road—a snake hunter's disappointment. *Herpetologica*, vol. 7, part 4, pp. 191-192, 4 photos, December 31.
55. 1954. Australian "Double-header." *Pacific Discovery*, vol. 7, no. 2, p. 13, 2 figs., March-April.
56. 1955. Notes on Australian amphibians. *Proceedings of the California Academy of Sciences*, ser. 4, vol. 98, no. 8, pp. 355-392, June 30.
57. 1955. Charting the "Enchanted Isles." In: *Essays in the Natural Sciences in honor of Captain Allan Hancock*. University of Southern California Press, pp. 99-110, 4 maps.

BIBLIOGRAPHY OF JOSEPH CHEESMAN THOMPSON

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(Note: This bibliography includes only Thompson's herpetological papers.)

1. 1908. VAN DENBURGH, JOHN, and ————. A new sea snake. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 4, pp. 41-47, 1 pl.
2. 1912. Description of a new genus and species of salamander from Japan. *Proceedings of the California Academy of Sciences*, ser. 3, vol. 9, pp. 183-186, May 3.
3. ———. Prodrome of a description of a new genus of Ranidae from the Loo Choo Islands. *Herpetological Notices* [privately printed], San Francisco, no. 1, pp. 1-3, June 15.
4. ———. Prodrome of descriptions of new species of Reptilia and Batrachia from the Far East. *Herpetological Notices* [privately printed], San Francisco, no. 2, pp. 1-4, June 28.
5. ———. On reptiles new to the island arcs of Asia. *Herpetological Notices* [privately printed], San Francisco, no. 3, pp. 1-5, July 31.
6. 1913. *Oxyrhopus trigeminus* Duméril and Bibron, the type of *Erythroxyrhopus* gen. nov. *Proceedings of the Academy of Natural Sciences, Philadelphia*, vol. 65, pp. 78-80, February.
7. ———. Notes on serpents in the Family Colubridae. *Proceedings of the Academy of Natural Sciences, Philadelphia*, vol. 65, pp. 213-218, April.
8. ———. Contributions to the anatomy of the Ophidia. *Proceedings of the Zoological Society, London*, pp. 414-425.
9. ———. Contributions to the synonymy of serpents in the Family Elapidae. *Proceedings of the Academy of Natural Sciences, Philadelphia*, vol. 65, pp. 508-514, September.
10. ———. The variations exhibited by mainland and island specimens of the hibakari snake, *Natrix vibakari* (Boie). *Proceedings of the United States National Museum*, vol. 46, no. 2020, pp. 157-160, September 30.
11. 1914. Contribution to the anatomy of the Ilysiidae. *Proceedings of the Academy of Natural Sciences, Philadelphia*, vol. 66, pp. 285-293, April.
12. ———. The variations exhibited by *Thamnophis ordinoides* (Baird and Girard), a garter snake inhabiting the Sausalito Peninsula, California. *Proceedings of the United States National Museum*, vol. 47, no. 2051, pp. 351-360, May 16.
13. ———. Further contributions to the anatomy of the Ophidia. *Proceedings of the Zoological Society, London*, pp. 379-402.
14. 1916. The variations exhibited by *Ancistrodon halys* (Pallas), a pit-viper inhabiting the Far East. *Transaction of the San Diego Society of Natural History*, vol. 10, no. 2, pp. 59-76.
15. 1917. The variation exhibited by *Thamnophis ordinoides* (Baird and Girard), a garter snake inhabiting the San Francisco Peninsula. *Proceedings of the United States National Museum*, vol. 52, no. 2179, pp. 345-366, March 7.